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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/017,630	12/14/2001	William R. Matz	36968/265389	9447
7590 12/08/2004				
SCOTT P. ZIMMERMAN PLLC		EXAMINER		
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CARY, NC 27519				
		ART UNIT		PAPER NUMBER
		3629		

DATE MAILED: 12/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/017,630

Applicant(s)

MATZ ET AL. *E*

Examiner

Jonathan Ouellette

Art Unit

3629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Request for Continued Examination

1. The Request filed on 11/12/2004 for Continued Examination (RCE) under 37 CFR 1.114 based on parent Application No. 10/017,630 is acceptable and a RCE has been established. An action on the RCE follows.

Response to Amendment

2. Claims 1-20 have been cancelled, and Claims 21-37 have been added; therefore, Claims 21-37 remain pending in application 10/017,630.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. **Claim 21 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.**

The basis of this rejection is set forth in a two-prong test of:

- (1) whether the invention is within the technological arts; and
- (2) whether the invention produces a useful, concrete, and tangible result.

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5. As an initial matter, the United States Constitution under Art. I, §8, cl. 8 gave Congress the power to "[p]romote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and

discoveries". In carrying out this power, Congress authorized under 35 U.S.C. §101 a grant of a patent to "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition or matter, or any new and useful improvement thereof."

Therefore, a fundamental premise is that a patent is a statutorily created vehicle for Congress to confer an exclusive right to the inventors for "inventions" that promote the progress of "science and the useful arts". The phrase "technological arts" has been created and used by the courts to offer another view of the term "useful arts". See *In re Musgrave*, 167 USPQ (BNA) 280 (CCPA 1970). Hence, the first test of whether an invention is eligible for a patent is to determine if the invention is within the "technological arts".

6. Further, despite the express language of §101, several judicially created exceptions have been established to exclude certain subject matter as being patentable subject matter covered by §101. These exceptions include "laws of nature", "natural phenomena", and "abstract ideas". See *Diamond v. Diehr*, 450, U.S. 175, 185, 209 USPQ (BNA) 1, 7 (1981). However, courts have found that even if an invention incorporates abstract ideas, such as mathematical algorithms, the invention may nevertheless be statutory subject matter if the invention as a whole produces a "useful, concrete and tangible result." See *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* 149 F.3d 1368, 1973, 47-USPQ2d (BNA) 1596 (Fed. Cir. 1998).

7. This "two prong" test was evident when the Court of Customs and Patent Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences (BPAI). See *In re Toma*, 197 USPQ (BNA) 852 (CCPA 1978). In *Toma*, the court held that the

recited mathematical algorithm did not render the claim as a whole non-statutory using the Freeman-Walter-Abele test as applied to *Gottschalk v. Benson*, 409 U.S. 63, 175 USPQ (BNA) 673 (1972). Additionally, the court decided separately on the issue of the "technological arts". The court developed a "technological arts" analysis:

The "technological" or "useful" arts inquiry must focus on whether the claimed subject matter...is statutory, not on whether the product of the claimed subject matter...is statutory, not on whether the prior art which the claimed subject matter purports to replace...is statutory, and not on whether the claimed subject matter is presently perceived to be an improvement over the prior art, e.g., whether it "enhances" the operation of a machine. *In re Toma* at 857.

8. In *Toma*, the claimed invention was a computer program for translating a source human language (e.g., Russian) into a target human language (e.g., English). The court found that the claimed computer implemented process was within the "technological art" because the claimed invention was an operation being performed by a computer within a computer.
9. The decision in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* never addressed this prong of the test. In *State Street Bank & Trust Co.*, the court found that the "mathematical exception" using the Freeman-Walter-Abele test has little, if any, application to determining the presence of statutory subject matter but rather, statutory subject matter should be based on whether the operation produces a "useful, concrete and tangible result". See *State Street Bank & Trust Co.* at 1374. Furthermore, the court found that there was no "business method exception" since the court decisions that purported to create such exceptions were based on novelty or lack of enablement issues and not on statutory grounds. Therefore, the court held that "[w]hether the patent's claims are too

broad to be patentable is not to be judged under §101, but rather under §§102, 103 and 112." See *State Street Bank & Trust Co.* at 1377. Both of these analysis goes towards whether the claimed invention is non-statutory because of the presence of an abstract idea. Indeed, *State Street* abolished the Freeman-Walter-Abele test used in *Toma*. However, *State Street* never addressed the second part of the analysis, i.e., the "technological arts" test established in *Toma* because the invention in *State Street* (i.e., a computerized system for determining the year-end income, expense, and capital gain or loss for the portfolio) was already determined to be within the technological arts under the *Toma* test. This dichotomy has been recently acknowledged by the Board of Patent Appeals and Interferences (BPAI) in affirming a §101 rejection finding the claimed invention to be non-statutory. See *Ex parte Bowman*, 61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001).

10. Claims 21 appear to be describing a method that is attempting to determine future actions by subscribers by analyzing data, wherein the data is made available from a database and the method user studies the data to determine/predict future subscriber actions. Thus, this process does not include a distinguishable apparatus, computer implementation, or any other incorporated technology, and would appear to be an attempt to patent an abstract idea not a "tangible" process and, therefore, non-statutory subject matter.

11. Mere intended or nominal use of a component, albeit within the technological arts, does not confer statutory subject matter to an otherwise abstract idea if the component does not apply, involve, use, or advance the underlying process.

12. In the present case, data is simply *stored* in a database; the data fails to be manipulated by a distinguishable apparatus, computer implementation, or any other incorporated technology in the invention as claimed.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claims 27-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Eldering et al. (US 6,457,010).**

13. As per **independent Claim 27**, Eldering discloses a system for providing a tailored media content, comprising a subscriber choice database (source material, C5 L26-46) merging information related to local programming information related to nation programming (descriptive fields, Fig.9B, C5 L26-46, C10 L54-61), and information related to actions taken by a subscriber while accessing and viewing content (subscriber profile, C4 L10-62); and a processor that predicts future actions taken by the subscriber (shows viewed, advertising viewed, C4 L52-62).

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14. As per **Claim 28**, Eldering discloses wherein the processor at least one of i) correlates the information related to local programming with the information related to actions taken by the subscriber and ii) correlates the information related to nation programming with the information related to actions taken by the subscriber.

15. As per Claim 29, Eldering discloses wherein the processor at least one of i) categorizes the information related to local programming and ii) categorizes the information related to nation programming.
16. As per Claim 30, Eldering discloses wherein the processor at least one of i) analyzes actions taken during preceding content and ii) analyzes actions taken during following content.

Claim Rejections - 35 USC § 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. **Claims 21-25 and 32-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eldering.**

19. As per **independent Claims 21 and 32**, Eldering discloses a method (computer program product) for providing a tailored media content, comprising: analyzing content from a content database, the content database storing information related to programming (source material, C5 L26-46); analyzing subscriber-action database, the subscriber action database storing information related to actions taken by a subscriber while viewing content (subscriber profile, C4 L10-62); and predicting future actions, taken by the subscriber (shows viewed, advertising viewed, C4 L52-62).

20. Eldering fails to expressly disclose two separate databases for local content and national content.
21. However, Eldering does disclose tracking source material, to include: program characteristics and descriptive fields (Fig.9B, C5 L26-46, C10 L54-61), and it would have been obvious to one of ordinary skill in the art at the time the invention made to separate the national and local content into two separate tables, because the data tracking system described by Eldering is an advancement on the claimed invention; offering reduced storage space and more efficient handling of data.
22. As per Claims 22 and 33, Eldering discloses merging the information related to local programming, the information related to nation programming, and the information related to actions taken by the subscriber to create subscriber choice information.
23. As per Claims 23 and 34, Eldering discloses at least one of i) correlating the information related to local programming with the information related to actions taken by the subscriber and ii) correlating the information related to nation programming with the information related to actions taken by the subscriber.
24. As per Claims 24 and 35, Eldering discloses at least one of i) categorizing the information related to local programming and ii) categorizing the information related to national programming.
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- ~~25. As per Claims 25 and 36, Eldering discloses wherein the step of predicting future actions~~
comprises at least one of i) analyzing actions taken during preceding content and ii) analyzing action taken during following content.

26. Claims 26, 31, and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eldering in view of Ludtke et al. (US 6,202,210).

27. As per Claims 26, 31, and 37, Eldering fails to expressly disclose wherein the processor analyzes actions taken by the subscriber to receive an alternate source of content.

28. Ludtke teaches monitoring viewer histories to include programming from additional AV sources/DVD player for marketing purposes (Fig.5, C7 L25-39).

Conclusion

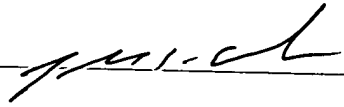
29. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Ouellette whose telephone number is (703) 605-0662. The examiner can normally be reached on Monday through Thursday, 8am - 5:00pm.

30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss can be reached on (703) 308-2702. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7687 for regular communications and (703) 305-3597 for After Final communications.

31. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-5484.

jo

December 2, 2004


JOHN G. WEISS
SUPERVISORY PATENT EXAMINER
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